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APPLICATION NO.	}	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/009,674		12/06/2001	Arnold Oliphant	. 1410.01	8264
26698	7590	08/10/2005		EXAMINER	
MYRIAD			HEINRICH, SAMUEL M		
INTELLECUTAL PROPERTY DEPARTMENT 320 WAKARA WAY SALT LAKE CITY, UT 84108				ART UNIT	PAPER NUMBER
				1725	
		•		DATE MAILED: 08/10/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Summany	10/009,674	OLIPHANT ET AL.					
Office Action Summary	Examiner	Art Unit					
	Samuel M. Heinrich	1725					
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply if NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim y within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. O (35 U.S.C. § 133).					
Status		·					
1) Responsive to communication(s) filed on 08 M	larch 2005						
	action is non-final.	•					
· <u> </u>	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4) ☐ Claim(s) 1-30 is/are pending in the application 4a) Of the above claim(s) is/are withdray 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-30 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/o	wn from consideration.						
Application Papers							
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) acc Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the Education of the Education of the drawing(s) be held in abeyance. See the drawing(s) is objected if the drawing(s) is objected in the drawing(s) is objected to by the Education of the drawing(s) is objected to by the Education of	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).					
Priority under 35 U.S.C. § 119							
12) △ Acknowledgment is made of a claim for foreign a) △ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority document 2. ☐ Certified copies of the priority document 3. △ Copies of the certified copies of the priority document application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicationity documents have been received (PCT Rule 17.2(a)).	on No ed in this National Stage					
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 02262004.	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:						

U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Art Unit: 1725

DETAILED ACTION

Allowable Subject Matter

The indicated allowability of claims 6-21, 24, 25, 28, and 29 is withdrawn in view of the newly discovered reference(s) to EP000670195A1, JP408174263A, and JP359090244A. Rejections based on the newly cited reference(s) follow.

Information Disclosure Statement

The information disclosure statement filed February 26, 2004 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP000670195A1 in view of JP408174263A. EP000670195A1 describes using a laser for ablation of fluorocarbon resin in order to remove material. The material is altered to contain different colors or pigments and the laser ablation varies depending on the different color. EP000670194A1 does not particularly state the colored materials are UV absorbing materials. JP408174263A describes the absorption response of resin materials containing inorganic particles such as carbon black and pigments have to laser beam irradiation. Resin materials containing either carbon black or pigments have a similar response with respect to laser absorption. The use of carbon black in the EP000670195A1 process would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because it is well known in the art that color pigments and carbon black both have the effect of absorbing laser energy. With respect to the instant claimed amount of UV absorbing material present (claims 2. 3, 8-15, 19, 20, 22, and 26), the EP000670195A1 describes various levels of reflectance which are desirable for optimum material removal, and the use of the instant claimed amounts of UV absorbing material would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on the properties of the materials such as layer thickness or type and size of the substrate. With respect to the instant claimed laser light wavelength and fluence, the use of a

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particular laser beam would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art depending on the properties of the coating and substrate materials being irradiated and on the available laser apparatus. Articles containing geometrical physical structures are well known in the art.

Microfluidic structures are well known in the art.

Claims 21, 23-26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP000670195A1 in view of JP408174263A as applied to claims 16, 22, and 23 above, and further in view of JP359090244A. EP000670195A1 pertains to ablation of an entire surface. JP359090244A describes selective laser formation of structure such as holes by ablation of a fluorocarbon containing material. The instant claimed step of forming microchannels or wells in the a substrate by using a laser with a fluorocarbon material comprising a laser light absorbing material such as carbon black would have been obvious at the time applicant's invention was made to a person having ordinary skill in the art because the forming of structural shapes with a laser is well known in the art and because selective laser light absorption for material treatment is well known in the art. Articles containing geometrical physical structures are well known in the art.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP410058168A and JP401191738A pertain to laser treatment of fluorocarbon resing and laser treatment of material containing carbon black.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Samuel M. Heinrich whose telephone number is 703 308 1168. The examiner can normally be reached on M-TH.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Dunn can be reached on 703 308 3318. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Samuel M. Heinrich May 31, 2005

Samuel M Heinrich Primary Examiner Art Unit 1725